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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/602,216	06/24/2003	Hiroko Suzuki	AD 6892 US NA	2243	
23906	7590 07/10/2006	07/10/2006		EXAMINER	
E I DU PONT DE NEMOURS AND COMPANY			TORRES VELAZQ	TORRES VELAZQUEZ, NORCA LIZ	
LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1128		ART UNIT	PAPER NUMBER		
4417 LANCASTER PIKE			1771		
WILMINGTON, DE 19805			DATE MAILED: 07/10/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Comment	10/602,216	SUZUKI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Norca L. Torres-Velazquez	1771				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be tim  11 apply and will expire SIX (6) MONTHS from  cause the application to become ABANDONEI	l. ely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 02 Fe	bruary 2006.					
3) Since this application is in condition for allowan	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Disposition of Claims						
4) ☐ Claim(s) 18-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 18-20 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examiner 10)☐ The drawing(s) filed on is/are: a)☐ acce Applicant may not request that any objection to the o Replacement drawing sheet(s) including the correcti 11)☐ The oath or declaration is objected to by the Examiner	epted or b) objected to by the E drawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P					

#### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 02, 2006 has been entered.

### Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.
- 3. Claims 19-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 4. Claims 19 and 20 recite the limitation "The interlining of new claim," in line 1. There is insufficient antecedent basis for this limitation in the claim. The claim is not referring to independent claim 1. "New claim" as part of the claim is not proper.

### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1771

6. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over OSTAPCHENKO (US 4,725,481) in view of LIM et al. (US 6,187,696 B1).

OSTAPCHENKO is directed to breathable fabrics. The reference teaches the use of an elastomer film material with formula similar to the one of the present invention. (Refer to abstract) Further the reference teaches melt bonding or adhesive bonding a textile material such as a nonwoven to the film. The textile materials used are polyethylene terephthalate or polyamides. (Refer to Col. 10, lines 39-65) The water vapor transmission rate of the OSTAPCHENKO materials read on the presently claimed range of 1000 to 20000 g/m² 24 h. (Refer to Example 2)

While OSTAPCHENKO teaches the use of adhesive bonding to bond a nonwoven to the film, it is silent to the use of a hot melt adhesive.

LIM et al. is directed to a moisture vapor permeable, substantially liquid impermeable composite sheet material comprising a fibrous substrate and a moisture vapor permeable thermoplastic film layer. (Abstract) The preferred film is a polyether block copolymer such as copolymers comprised of block co polyether esters. (Refer to Col. 5, lines 7-10) The preferred nonwoven material for the fibrous substrate is a fibrous polyolefin nonwoven web. The reference also teaches the use of blends of polyolefin and polyester fibers such as polyethylene terepthalate. And the reference further teaches that polyamides can be used as the synthetic polymer of the nonwoven. (Refer to Col. 5, lines 36-59 and Col. 6, lines 4-6) LIM et al. teaches that the adhesive is applies to the surface of the fibrous substrate to which the moisture vapor permeable film is to be attached prior to application of the film. The adhesive is preferably applied to the substrate in a dispersed spray pattern and the applied adhesive cover less than 75%

of the surface of the fibrous substrate so that the film layer coated over the adhesive will be discretely bonded to the fibrous substrate and the adhesive will not significantly reduce the moisture vapor transmission rate of the composite sheet. (Col. 7, lines 12-25) LIM et al. further teaches that the preferred adhesive is a pressure sensitive hot melt adhesive. (Col. 7, lines 41-48)

Since both references are directed to moisture vapor permeable, liquid impermeable composite sheet materials, the purpose disclosed by LIM et al. would have been recognized in the pertinent art of OSTAPCHENKO.

OSTAPCHENKO discloses the claimed invention except that it only teaches adhesive bonding instead of hot-melt adhesive, LIM et al. shows that hot-melt adhesives are structures known in the art of moisture vapor permeable, liquid impermeable composite sheet materials. Therefore, because hot-melt adhesives were art-recognized adhesives at the time the invention was made, one of ordinary skill in the art would have found it obvious to use a hot-melt adhesive in the lamination of the film structure of OSTAPCHENKO with a nonwoven textile material.

Although OSTAPCHENKO does not explicitly teach the claimed air permeability and water pressure resistance it is reasonable to presume that these properties are inherent to the material of OSTAPCHENKO. Support for said presumption is found in the use of like materials (i.e. similar composition of film, laminated by an adhesive to a nonwoven). The burden is upon Applicant to prove otherwise. In re Fitzgerald 205 USPQ 594. In addition, the presently claimed property of air permeability and water pressure resistance claimed herein would obviously have been present once the product of OSTAPCHENKO is modified as described above by the teachings of LIM et al. is provided. Note In re Best, 195 USPQ at 433, footnote 4 (CCPA 1977) as to the providing of this rejection made above under 35 USC 102.

7. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over VROUENRAETS et al. (US 4,493,870) in view of LIM et al. (US 6,187,696 B1).

VROUENRAETS et al. is directed to a flexible layered product for use in waterproof garments of a textile material covered with a waterproof material having a water vapor transmission rate of at least 1000 g/m² day. (Abstract) The reference teaches using fabrics based on polyethylene terephthalate. (Col. 2, lines 39-42) The film is a co-polyether ester consisting of a plurality of recurrent intralinear long-chain ester units and short-chain ester units, which are randomly joined heat-to-tail through ester bonds. The long-chain ester units and short-chain ester units formulas are similar to the ones of the material of the present invention. (Refer to Col. 1, lines 53 through Col. 2, lines 1-29) The reference further teaches that the co-polyester film may be attached to the porous textile material in various ways, which may include a heat treatment, sewing or the use of an adhesive. (Col. 5, lines 67 bridging to Col. 6, lines 1-7)

Since both references are directed to moisture vapor permeable, liquid impermeable composite sheet materials, the purpose disclosed by LIM et al. would have been recognized in the pertinent art of VROUENRAETS et al.

VROUENRAETS et al. discloses the claimed invention except that it only teaches adhesive bonding instead of hot-melt adhesive, LIM et al. shows that hot-melt adhesives are structures known in the art of moisture vapor permeable, liquid impermeable composite sheet materials. Therefore, because hot-melt adhesives were art-recognized adhesives at the time the invention was made, one of ordinary skill in the art would have found it obvious to use a hot-melt adhesive in the lamination of the film structure of VROUENRAETS et al. with a nonwoven textile material.

Although VROUENRAETS et al. does not explicitly teach the claimed air permeability and water pressure resistance it is reasonable to presume that these properties are inherent to the material of VROUENRAETS et al. Support for said presumption is found in the use of like materials (i.e. similar composition of film, laminated by an adhesive to a nonwoven). The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of air permeability and water pressure resistance claimed herein would obviously have been present once the product of VROUENRAETS et al. is modified as described above by the teachings of LIM et al. is provided. Note In re Best, 195 USPQ at 433, footnote 4 (CCPA 1977) as to the providing of this rejection made above under 35 USC 102.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

VAN DE VEN (WO 94/19178)

## Response to Arguments

- 9. Applicant's arguments with respect to claims 18-20 have been considered but are moot in view of the new ground(s) of rejection. It is noted that no new matter has been introduced in the new claims.
- 10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 571-272-1484. The examiner can normally be reached on Monday-Thursday 8:00-5:00 pm and alternate Fridays.

Art Unit: 1771

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Norca L. Torres-Velazquez Primary Examiner Art Unit 1771

June 30, 2006